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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,988	07/23/2001	Shigeru Tanaka	Q64671	1372

7590 01/29/2003

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EXAMINER

PRONE, JASON D

ART UNIT PAPER NUMBER

3724

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application N .

09/909,988

Applicant(s)

TANAKA ET AL.

Examiner

Jason Prone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2002 .
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 13-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 08 November 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____ .

DETAILED ACTION

Election/Restrictions

Examiner notes new claims 22-26 in the amendment filed 08 November 2002. On page 6 of the amendment, Applicant states "...these new claims are allowable at least because of their dependency from claim 1...", however, claim 22, as written, is independent and not dependent from claim 1. Since all the new claims would belong to the group not elected in the election filed 22 May 2002, the new claims are considered withdrawn and only the elected claims 1-12 will be examined.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 6-7 rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al.

Watanabe et al. discloses the same invention including an apparatus of estimating a lifetime of a cutter (Abstract), a detector for detecting a value of a parameter (Column 7 lines 28-30), a comparator (62), an output element (Column 7 lines 21-28), that the comparator determines if the cutter is unfit for use (Column 7 lines 28-30), and that the comparator is in a microcomputer (Fig. 6).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-5 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Iwasaki. Watanabe et al. discloses the invention including a motor driving the cutter (8) but fails to disclose that the parameters detected are a value of current loaded in the motor and/or the time required to complete the task, and that ammeter and timer element are used to measure the respective parameters. Iwasaki teaches the use of detecting the value of current loaded in the motor parameter and the time required to complete the task parameter (Column 1 lines 19-27). Examiner notes that current is measured in amps and an ammeter is used to measure amps therefore it is inherent that an ammeter would be present. Also, it is inherent that a timekeeper be used to measure the time parameter. Therefore, it would have been obvious to one skilled in the art, at the time of the invention, to have provided Watanabe et al. with a current load and time detector for an alternate method of detecting wear.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. The Watanabe et al. does not teach the use of a visual display, however, official notice is taken that the use of an output element comprising a visual display is old and well known in the art. Therefore, it would have been obvious to one skilled in the art, at the time of the invention, to have provided Watanabe et al. with an

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output element comprising a visual display for an easier way of seeing the output element.

The combination of Watanabe et al. and Iwasaki discloses the same structure as Applicant and, therefore, the joint structure of Watanabe et al. and Iwasaki can perform the method of claims 9-12.

Response to Arguments

6. Applicant's arguments filed 08 November 2002 have been fully considered but they are not persuasive. Watanabe et al.'s detector does detect a tool offset value caused by wear, however, this offset value is a "cutting resistance during cutting" parameter because both the cutting resistance and the tool offset value are both produced by the amount of use/wear of the cutting tool and when the tool offset and cutting resistance reach a predetermined value the cutting tool is no longer used. As claimed, the detector of the Watanabe et al. patent is equivalent to the "cutting resistance during cutting" and, therefore, the 35 USC § 102 and the 35 USC § 103 rejections are valid and will remain.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

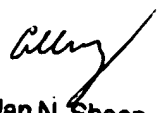
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 703-605-4287. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen N. Shoap can be reached on 703-308-1082. In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.



JP
January 24, 2003


Allan N. Shoap
Supervisory Patent Examiner
Group 3700